

Some determinants of opposite-sex friendships initiation and dissolution

SVJETLANA SALKIČEVIĆ

From the evolutionary perspective, friends help us solve the adaptive problems of reproduction, our own survival, and survival of our offspring. Opposite-sex friendships (OSFs) provide individuals with a wider net of quality friends, potential mates, and protectors, with sex differences originating in parental investment differences: in OSFs men pursue sexual access, while females seek physical protection and long-term mate potential. We investigated the relationship of sex, gender roles, sociosexuality (SOI), and romantic involvement with the reasons for OSFs initiation and dissolution in a sample of 94 female and 90 male heterosexual students of Zagreb University. Initiation of OSF because of sexual attraction and availability is more important to men and participants with higher SOI, while friendship dissolution for the same reason is more important to those with higher SOI, masculinity, and femininity. Initiation of OSF because of physical protection is more important to women and participants with higher femininity, and dissolution for the same reason is more important to women; OSF initiation because of romantic relationship potential is more important to men. These findings can be explained by sex differences in long-term mating strategies, rendering the reasons for initiation of OSFs similar to those for engaging in long-term romantic relationships.

Key words: opposite-sex friendships, sociosexuality, gender roles, relationship status

Friendship is a close relationship in which people share mutual activities, develop social network, feel accepted, help each other, and develop trust, mutual respect, and affection (Aronson, Wilson, & Akert, 2005). Quality of friendship depends on the sex of friends; friendships among women are characterized by more closeness, while men's friendships are based on the mutual activity (Bank & Hansford, 2000; Fehr, 1996). Other factors that affect friendship are personality (Bubaš & Bratko, 2007), attachment style (Grabbill & Kerns, 2000), and lifestyle. In modern society with increased mobility, friendships have started to fulfil roles previously occupied by family members (Doyle & Smith, 2002).

Research of opposite-sex friendship (OSF) is relatively new, probably because they are considered a historical novelty and because they are rarer than same-sex friendships (Monsour, 2002). The OSF is a form of friendship that has historically been probably under the largest influence of cultural norms, as it is often believed that the only reason for unrelated men and women spending time together is a romantic relationship (Rawlins, 1982). OSFs are similar to same-sex friendships as they are platonic, non-exclu-

sive, and not ruled by passion according to Rubin (1985) and Sternberg (1986; both as cited in Lenton & Webber, 2006). But attraction is often experienced in OSFs (Afifi & Faulkner, 2000; Bleske & Buss, 2000; Bleske-Rechek et al., 2012; Halatsis & Christakis, 2009; Kaplan & Keys, 1997; Reeder, 2000; Weger & Emmet, 2009) and, while it doesn't necessarily mean it has been realized in the form of sexual relations (Reeder, 2000), research by Afifi and Faulkner (2000) has shown that about half young men and women have had sexual intercourse with an opposite-sex friend. Men and women misperceive opposite-sex friends' sexual interest in them, in the way that they project their own sexual interest: men overperceive and women underperceive their friends' sexual interest (Koenig, Kikpatrick, & Ketelaar, 2007). When all of that is taken into account, it seems social theory predicts platonic OSF, but research often finds some characteristic of romantic relationship in friendships.

From the evolutionary perspective, friendship was until recently not considered to be a distinct type of relationship, with its own specific psychological mechanisms, whose benefits and costs were related to two basic evolutionary problems: survival and reproduction. Essentially, this means that friends helped our ancestors in their everyday survival, sharing food and shelter and caring for them when they were injured or ill (Buss, 2008). Potential costs of friendships included providing the enemy with confidential information and competing for the same resources or part-

Svjetlana Salkičević, Department of Psychology, Faculty of Humanities and Social Sciences, University of Zagreb, Ivana Lučića 3, Zagreb, Croatia. E-mail: ssalkice@ffzg.hr (the address for correspondence).

ners. Benefits and costs also depend on the friend's gender: same-sex friendships are more functional and meet the need for acceptance (Rose 1985; by Canary & Emmers-Sommer, 1997), but, at the same time, same-sex friends can become rivals in the struggle for a partner (Buss, 2008). The OSFs allow us a glimpse of the opposite sex (Canary & Emmers-Sommer, 1997) and provide us with information on effective ways to attract partners (Bleske & Buss, 2000). In this way they make us more efficient in attracting a partner, make us better partners, and provide us with a larger base of potential partners, through social network spreading.

Another way of looking at OSFs is that men's and women's perceptions of opposite-sex friends are a manifestation of evolved human mating strategies. Sex differences are the result of adaptation to different problems sexes have faced during evolution. Trivers (1972) proposed the theory of parental investment according to which men and women have different strategies in partner selection due to the different amount of resources invested in offspring. Women have invested more in offspring delivery (pregnancy) and survival (lactation and other types of feeding, health care), and have become more discriminating, looking for a partner who would provide support during pregnancy and offspring upbringing. Men's goal of finding fertile partners, to ensure as many descendants as possible, resulted in evolving preferences for access to a variety of sex partners (Bleske & Buss, 2000). Results of much research have confirmed those predictions: in different cultures men display a stronger orientation toward short-term mating (Buss & Schmitt, 1993; Jackson & Kirkpatrick, 2007; Schmitt, 2005), desire a greater number of sex partners (Schmitt, Shackelford, Duntley, Tooke, & Buss, 2001), and also fantasize more about sexual access to different partners (Ellis & Symons, 1990). After initial sexual access to their partners, they experience lower levels of sexual attraction to them (Haselton & Buss, 2001) and also, after being exposed to desirable women, they tend to downgrade commitment to their current romantic relationship (Kenrick, Neuberg, Zierk, & Krones, 1994). Other differences include men's attentional bias to highly attractive women (Maner, Gailliot, & DeWall, 2007) and their tendency to over infer the degree of sexual attraction in ambiguous signals from women (Haselton & Buss, 2000).

Applying the evolutionary approach to OSF, we can predict the differences in motives for friendships initiation as well as in the reasons for their preservation or dissolution. We hypothesize that women will look for opposite-sex friends who will protect them and care for them, while for men it would be more important to have beautiful and sexually attractive and accessible friends. Bleske and Buss's (2000) results confirmed this assumption: sexual relationship with a friend was more important for men, while physical protection was more important for women. Being involved in a romantic relationship should resolve those adaptive problems for both women and men and thus reduce the need for initiating friendships with a potential for

turning into a romantic relationship, as was confirmed by Bleske-Rechek and Buss (2001).

In addition to biological sex, men and women differ in the predictable and sustainable manner in other characteristics called gender roles. Even though gender roles were presumed to be a combination of sex based preferences, personality characteristics, attitudes, and behavior gained through the process of sex roles acquisition (Marušić, 1994), behavioral genetic research showed the heritability of masculinity and femininity similar to some other personality research (Lippa & Hershberger, 1999). There are four gender roles: masculine, feminine, androgynous, and undifferentiated; characteristics typical for men are considered masculine (e.g., assertive), while feminine characteristics are those typical for women (e.g., loyal). Androgyny is characterized by even presence of masculine and feminine characteristics, while undifferentiated role is characterized by small representation of masculine and feminine characteristics. Comparing four gender roles Reeder (2003) and Lenton and Webber (2006) showed that men with a higher score on femininity and women with a higher score on masculinity have more opposite-sex friends. Given the lack of research concerning OSFs with regard to gender roles, we wanted to investigate whether reasons for OSFs initiation and dissolution can be additionally explained by those variables.

Sociosexuality is a personality trait related to individual differences in the willingness to engage in sexual relations without emotional attachment, intimacy, and commitment to another person (Snyder, Simpson, & Gangestad, 1986). Individuals at the one extreme of this dimension have a restricted sociosexuality and insist on commitment and closeness prior to a sexual intercourse, while individuals at the other extreme have unrestricted sociosexuality and are comfortable with engaging in sexual relationships without closeness and commitment (Simpson & Gangestad, 1991). Some variations in sociosexuality can be explained by gender: men have more permissive attitudes and are more likely to engage in casual sexual relationships (Buss & Barnes, 1986) and thus tend to have unrestricted sociosexuality, although the variability of sociosexuality is greater within sexes than between sexes (Simpson & Gangestad, 1991). These gender differences can be explained by different selection pressures acting upon men and women during evolution, due to the differences in parental investment. Willingness to engage in sexual relations could be related to giving bigger importance to sexual availability and its lack as a reason for OSF initiation and resolution, as was found by Bleske-Rechek and Buss (2001): participants with unrestricted sociosexuality view the OSFs as an opportunity for sexual intercourse.

Given the lack of studies on friendship, especially OSF, our aim was to investigate the relationships between gender, gender roles, sociosexuality, and involvement in a romantic relationship with the reasons for OSF initiation and dissolution. In order to maximize the external validity, we based

our study design and instruments on the research done by Bleske-Rechek and Buss (2001). On the basis of previous research and the theory of parental investment we expect:

- a) male participants and participants with higher socio-sexuality regardless of gender to assess sexual attraction and availability as more important reasons for OSF initiation and dissolution;
- b) female participants to assess physical protection as a more important reason for OSF initiation and dissolution;
- c) participants of both sexes who are romantically involved to assess the potential for the development of friendship into a romantic relationship as a less important reason for OSF initiation and dissolution.

METHOD

Participants and procedure

The sample consisted of 184 heterosexual students, student dormitory residents in Zagreb. The average age of both male ($N = 90$) and female students ($N = 94$) was 21.8 years. Fifty-two percent of females were in a romantic relationship with the average duration of 2 years and 8 months, while 38.9% of males reported to be in a romantic relationship with the average duration of 2 years and 3 months. The study was conducted in the student dormitory where participants filled out questionnaires individually in their rooms.

Instruments

Personal information questionnaire. Participants answered 15 questions about their gender, age, sexual orientation, involvement in a romantic relationship, and number of opposite and same-sex friendships.

Bem Sex Roles Inventory (Bem, 1974) consists of 60 items divided into three categories (masculine, feminine, and neutral), on which participants rate themselves on a 7-point scale (1 = *never or almost never*, 7 = *always or almost always*). The results are expressed as the average score on the feminine and masculine items. Example items for feminine scale are "Shy", "Loyal", "Soft spoken" and for masculine scale "Assertive", "Self-sufficient", "Ambitious". Reliability coefficients in this sample were $\alpha = .83$ for the masculine and $\alpha = .78$ for the feminine subscale.

Sociosexual Orientation Inventory (Simpson & Gangestad, 1991) consists of seven questions. The first three items are free-response self-report items (e.g., "With how many people have you had sex in the last 12 months?"). These items can cause scores on the whole scale to be highly skewed, so they were recoded onto a 9-point scale, as recommended by Penke and Asendorpf (2008). The Sociosexual Orientation Inventory also has three attitudinal items

(e.g., "Sex without love is OK") where participants indicate strength of agreement on a 9-point scale (1 = *I strongly disagree*, 9 = *I strongly agree*) and an item assessing frequency of sexual desire, which is scored on an 8-point scale (1 = *never*, 8 = *at least once a day*). The total score is calculated following a formula developed by Simpson and Gangestad (1991): $5 \times (\text{Item 1}) + 1 \times (\text{Item 2 recoded}) + 5 \times (\text{Item 3}) + 4 \times (\text{Item 4}) + 2 \times (\text{aggregate of Items 5 to 7 recoded})$. The higher score indicates a greater readiness for engaging in sexual relations without emotional attachment and is associated with having sex early in a relationship and having sexual relationships with more than one partner at a time. Reliability of the inventory was $\alpha = .80$.

Before filling out questionnaires about reasons for OSF initiation and dissolution, participants were instructed to imagine their best opposite-sex friend, write his or her initials, and answer the questions with that person in mind. All of the questionnaires were translated and items were selected based on their meaning and relevance for current study.

Benefits of Friendship (Bleske & Buss, 2000) consists of 28 potential benefits of friendship, which tapped different categories, such as advice about the opposite sex, common interests, companionship, conversation, desire for sex, emotional support, physical protection, resource acquisition, self-esteem boost, and sexual attraction. Participants evaluated the importance of those benefits for the OSF initiation on a 7-point scale (1 = *not at all important*, 7 = *very important*). All the items were written in past tense in order to prompt the participants to think about the time in which the friendship was initiated (e.g., "There was a possibility of a future relationship beyond friendship."). Reliability of the questionnaire was $\alpha = .89$.

Characteristics Desired in a Friend (Bleske-Rechek & Buss, 2001) consists of 40 characteristics found in a relationship partner (mate, friend, or coalition partner). Participants assessed the desirability of those characteristics in the OSF on a 5-point scale (-2 = *very undesirable*, 0 = *neutral*, 2 = *highly desirable*; e.g., "Good-looking", "Intelligent", "Good cook", "Good social skills"). Reliability of the questionnaire was $\alpha = .87$.

Reasons for Dissolving Friendship (Bleske-Rechek & Buss, 2001) consists of 51 potential reasons for friendship dissolution, whose importance for OSF participants evaluated on a 7-point scale (1 = *not at all important*, 7 = *very important*). The list covered several categories, including betrayal (e.g., "He told others about our private conversation"), miscommunication (e.g., "We had a hard time communicating"), lack of common interests (e.g., "We had no common interests"), lack of sexual attraction (e.g., "I lost my sexual attraction to him or her"), and jealousy of other people (e.g., "He or she was jealous of other men or women in my life"). Reliability of the questionnaire was $\alpha = .93$.

The assessment of attractiveness of the opposite-sex friend. Participants were asked to assess, on a 7-point scale

(1= *not at all* or *never*, 7 = *very much* or *very often*), how attractive they found their opposite-sex friends, how often they had felt a desire to have a committed romantic relationship with them, and how often they had felt a desire to have sexual intercourse with them.

RESULTS

Eighty-four out of 90 males (93.3%) and 92 out of 94 females (97.9%) reported having same-sex friends, and 71 male (78.9%) and 82 female participants (89.1%) reported having opposite-sex friends. Females on average reported

having three same-sex and two opposite-sex friends, while males had four same-sex and two opposite-sex friends. Females had a higher result on the femininity scale of Bem Sex Roles Inventory (men: $M = 4.6$, $SD = 0.58$; women: $M = 5.1$, $SD = 0.53$; $F(1/175) = 41.044$, $p < .01$, $d = 0.86$), while males had higher results on the masculinity scale (men: $M = 4.9$, $SD = 0.66$; women: $M = 4.6$, $SD = 0.75$; $F(1/175) = 9.648$, $p < .02$, $d = 0.40$.) and on the Sociosexual Orientation Inventory (men: $M = 58.9$, $SD = 25.54$; women: $M = 37.9$, $SD = 16.75$; $F(1/164) = 39.203$, $p < .01$, $d = 0.87$).

In order to examine the predictors for OSF initiation and dissolution, we created six criterion variables based on standardized items concerning friendship initiation and dissolution, which were then averaged. We have used items from the three questionnaires and three items in which opposite-sex friend's attractiveness was assessed. Items used to test each hypothesis are shown in the Table 1.

Two-way analysis of variance, with gender and relationship status as factors, has shown the effect of gender on five variables, except the variable of the dissolution of friendship because of no possibility of friendship developing in a romantic relationship (Table 2). Males considered sexual attraction and availability, and romantic relationship potential as a more important reason for initiation and dissolution of friendship. Females gave greater importance to physical protection as a reason for friendship initiation and dissolution. There was an interaction effect of both gender and relationship status on the variable of sexual attraction and availability as reasons for friendship initiation, $F(1, 177) = 2.83$, $p < .05$: the group of unattached males, compared to the other three groups, gave a greater importance to this reason for friendship initiation.

From the correlations between variables displayed in Table 3 we can see gender and sociosexuality were correlated to all the criterion variables, the lowest being the one between gender and dissolution of friendship due to lack of sexual attraction ($r = -.20$, $p < .01$) and highest also for gender with initiation of friendship due to physical protection ($r = .64$, $p < .01$). Relationship status, femininity, and masculinity each had only two statistically significant correlations with criteria, with only two of those in the medium range: femininity with physical protection criteria initiation ($r = .40$, $p < .01$) and dissolution ($r = .37$, $p < .01$). In our criteria variables, romantic and sexual reasons for initiation and dissolution highly intercorrelated.

The results of regression analysis (method Enter) with gender, relationship status, sociosexuality, and gender roles as predictors, and six newly formed variables as criteria are shown in Table 4. Statistically significant predictors of OSF initiation because of sexual attraction were gender and sociosexuality (male participants with less restrained sociosexuality evaluate sexual attraction as more important). Significant predictors of OSF dissolution because of the lack of sexual attraction were sociosexuality, femininity, and mas-

Table 1

Items used to test hypotheses about opposite-sex friendship (OSF) initiation and dissolution

| Hypothesis 1 - sexual attraction and availability as reasons for friendship initiation and dissolution | |
|---|--|
| Initiation | She (he) had sex with me. She (he) was someone I used sexually. Good-looking Physically attractive Sexually attractive I find my opposite-sex friend sexually attractive. I have felt a desire to have sexual intercourse with my opposite-sex friend. |
| Dissolution | I lost my physical attraction to her (him). I was not physically attracted to her (him). There wasn't enough sex in our relationship. I started to find him sexually attractive, but she (he) was not sexually attracted to me. |
| Hypothesis 2 - physical protection as a reason for friendship initiation and dissolution | |
| Initiation | He (she) protected me. He (she) walked me to my car at night. Physically strong. |
| Dissolution | He (she) failed to physically protect me when I was in danger. |
| Hypothesis 3 - potential for the development of friendship into a romantic relationship as a reason for friendship initiation and dissolution | |
| Initiation | There was the possibility of a future relationship beyond friendship He (she) was everything I could ask for in a romantic partner. I have felt a desire to have a committed romantic relationship with my opposite-sex friend. |
| Dissolution | He started paying attention to other women. I started having romantic feelings for her (him) and she (he) didn't have those feelings for me. |

Note. All the items were first standardized and results were expressed as z-values, then the average result was calculated for every participant on the six newly formed variables. Initiation = items used to test the reason for OSF initiation; Dissolution = items used to test the reason for OSF dissolution.

Table 2
Results of MANOVA for the factors of gender and relationship status on the six dependent variables of reasons for opposite-sex friendship initiation and dissolution

| | Gender | <i>n</i> | <i>M</i> | <i>SD</i> | <i>F</i> (<i>df</i>) | Relationship | <i>n</i> | <i>M</i> | <i>SD</i> | <i>F</i> (<i>df</i>) |
|-----------------------|--------|----------|----------|-----------|---------------------------|--------------|----------|----------|-----------|---------------------------|
| Sex relationship | | | | | | | | | | |
| Initiation | male | 74 | 0.28 | 0.62 | 23.42** | yes | 69 | -0.26 | 0.60 | 13.40** |
| | female | 83 | -0.25 | 0.59 | (1/156) | no | 89 | 0.18 | 0.66 | (1/158) |
| Dissolution | male | 82 | 0.17 | 0.83 | 4.63* | yes | 75 | -0.07 | 0.63 | 1.61 |
| | female | 89 | -0.14 | 0.62 | (1/170) | no | 98 | 0.06 | 0.81 | (1/172) |
| Protection | | | | | | | | | | |
| Initiation | male | 81 | -0.46 | 0.61 | 107.80** | yes | 73 | 0.07 | 0.68 | 0.07 |
| | female | 88 | 0.45 | 0.50 | (1/168) | no | 97 | -0.03 | 0.74 | (1/169) |
| Dissolution | male | 84 | -0.62 | 0.80 | 75.09** | yes | 78 | 0.19 | 1.01 | 1.44 |
| | female | 91 | 0.57 | 0.80 | (1/174) | no | 99 | -0.15 | 0.97 | (1/176) |
| Romantic relationship | | | | | | | | | | |
| Initiation | male | 75 | 0.26 | 0.80 | 14.02** | yes | 70 | -0.19 | 0.72 | 3.54 |
| | female | 84 | -0.26 | 0.71 | (1/158) | no | 90 | 0.12 | 0.83 | (1/159) |
| Dissolution | male | 83 | 0.12 | 0.80 | 1.15 | yes | 78 | 0.01 | 0.74 | 0.02 |
| | female | 91 | -0.08 | 0.73 | (1/173) | no | 98 | -0.01 | 0.80 | (1/173) |

* $p < .05$. ** $p < .01$.

Table 3
Correlations among gender, relationship status, sociosexuality, femininity, masculinity, and reasons for opposite-sex friendship initiation and dissolution

| Variable | Relationship | Sociosexuality | Femininity | Masculinity | Sexual attraction | | Physical protection | | Romantic relationship potential | |
|--|--------------|----------------|------------|-------------|-------------------|-------------|---------------------|-------------|---------------------------------|-------------|
| | | | | | Initiation | Dissolution | Initiation | Dissolution | Initiation | Dissolution |
| Gender | -.13 | -.44** | .44** | -.23** | -.39** | -.20** | .64** | .61** | -.34** | -.12 |
| Relationship | | .30** | -.17* | .01 | .26** | .08 | -.07 | -.17* | .14 | -.02 |
| Sociosexuality | | | -.23** | .25** | .43** | .32** | -.24** | -.30** | .33** | .23** |
| Femininity | | | | .00 | -.08 | .08 | .40** | .37** | -.03 | -.03 |
| Masculinity | | | | | .15* | .21** | -.06 | -.06 | .11 | .01 |
| Sexual attraction | | | | | | | | | | |
| Initiation | | | | | | .50** | -.16* | -.20** | .72** | .33** |
| Dissolution | | | | | | | -.07 | .08 | .36** | .58** |
| Physical protection | | | | | | | | | | |
| Initiation | | | | | | | | .56** | -.16* | -.02 |
| Dissolution | | | | | | | | | -.22** | .12 |
| Romantic relationship potential - Initiation | | | | | | | | | | .28** |

* $p < .05$. ** $p < .01$.

Table 4
Results of the regression analysis with the reasons for friendship initiation and dissolution as criteria

| Predictors | Sexual attraction | | Physical protection | | Romantic relationship potential | |
|----------------|-----------------------|------------------------|-----------------------|------------------------|---------------------------------|------------------------|
| | Initiation β | Dissolution β | Initiation β | Dissolution β | Initiation β | Dissolution β |
| Gender | -.27** | -.09 | .63** | .54** | -.29** | -.02 |
| Relationship | .14 | .05 | -.03 | -.04 | .04 | -.03 |
| Sociosexuality | .32** | .29** | .08 | -.03 | .24** | .24* |
| Femininity | .15 | .21* | .15* | .16 | .16 | .05 |
| Masculinity | .03 | .12* | .05 | .06 | .02 | .03 |
| R^2 | .28 | .16 | .44 | .38 | .19 | .05 |
| R^2_c | .26 | .13 | .42 | .36 | .16 | .02 |
| F | 11.47** | 5.50** | 23.44** | 17.81** | 6.72** | 1.56 |

Note. Gender – lower values signify male gender; Relationship – lower values signify being single; Sociosexuality – higher values signify higher results on the Sociosexual Orientation Inventory; Femininity and Masculinity – higher values signify higher results on the feminine and masculine subscales of the Bem Sex Roles Inventory.

* $p < .05$. ** $p < .01$.

culinity (participants with a higher score on these measures evaluate the lack of sexual attraction as more important). However, this criterion was the second least explained by our predictors.

Female gender was a significant predictor for OSF initiation and dissolution because of physical protection, with femininity as another significant predictor for friendship initiation. These two criteria were the best explained ones, with $R^2_{\text{c initiation}} = .42$ and $R^2_{\text{c dissolution}} = .36$.

Criteria of OSF initiation because of the potential for OSF developing into a romantic relationship were poorly explained. Regression equation explained only 16% of the initiation criteria, with significant predictor being gender and sociosexuality: male participants with less restrained sociosexuality viewed this reason as more important. Lack of potential for the romantic relationship as a reason for breaking off the OSF was not explained by the used predictors.

DISCUSSION

Our results show the expected gender differences in reasons for initiation and dissolution of OSFs: men evaluate physical and sexual attraction and desire for sexual intercourse as more important reasons for OSF initiation, while women evaluate physical protection and the lack of it as a more important reason for OSF initiation and dissolution, which is in accordance with Bleske and Buss' (2000) results. Our unexpected result is that men, compared to women, have evaluated the potential for OSF developing into a romantic relationship as a more important reason for OSF initiation.

These results would suggest that men have two goals when initiating OSFs: a short-term one—to have easily accessible potential sexual partners, and a long term one—to have an available potential long term partner. For men, these two strategies are not mutually exclusive, but complementary. The basic adaptive mating problems faced by man in the course of evolution were to choose a partner that can provide offspring (fertile) and to be sure of the paternity of his children (fateful and reliable). Short-term reproductive strategies solve the problem of reproductive success (higher number of offspring), but promiscuity had unwelcome consequences (Buss, 2003, 2008). Women looked for partners who were willing to invest in them and their offspring, and males who were not willing to do it had lower chance of attracting a partner. This was especially true for women with higher mate value, which have a higher circle of potential partners from which to choose. For men, other reasons for investing in a partner and offspring are to increase the offspring survival and to have a better control of offspring paternity (spending time with partner reduces the opportunity for her cheating). The problem of selecting a fertile partner still remained, and to solve it men have evolved preferences for clues of fertility and health, i.e., youth and beauty.

However, when choosing a long term partner, preferences do not stop at physical attributes. Like women, men prefer partners who are intelligent, nice, understanding, with similar values, attitudes, personality traits, and religious beliefs, thus increasing the odds for a successful long-term relationship (Buss, 2008), and there is no better way to get to know a person than through friendship. Our results show that men choose female friends in a similar way they choose sexual partners, but those friends also satisfy the criteria for long-term romantic partners. Lewis et al. (2011) found men and women preferred characteristics in their opposite-sex friends similar to mate preferences exhibited by the sexes, but that can also be explained by the benefit of having more mating opportunities with desirable partners, as attractive women tend to be friends (Bleske-Rechek & Lighthall, 2010) and one's male friend has access to all of them. Another benefit of having attractive opposite-sex friends is that it may enhance one's mate value as others perceive it, i.e., through the mechanism of mate copying, which has been observed in humans (Hill & Buss, 2008; Place, Todd, Penke, & Asendorp, 2010; Waynforth, 2007).

Gender and sociosexuality are significant predictors of OSF initiation because of sexual availability and attractiveness and in OSF initiation because of the potential for a romantic relationship. Participants with higher sociosexuality estimate sexual attractiveness and accessibility and romantic relationship potential as more important. Sociosexuality had a greater effect on the OSF initiation because of sexual availability, which was expected and previously reported by Bleske-Rechek and Buss (2001). The mechanism could be that higher sociosexuality means signs of sexual and romantic relationships are more prominent, because they are looking for them or they perceive them more easily.

Dissolution of friendship due to the lack of sexual attraction and availability and the lack of relationship potential were also predicted by sociosexuality, but these two criteria were poorly explained. As higher sociosexuality means less sexual exclusivity, more partners, and permissive attitudes toward casual sex, it could mean that participants with higher sociosexuality consider signs of sexual and romantic rejection important enough to break friendships. Masculinity is positively correlated with sociosexuality and shows the same effect. Femininity emerged quite unexpectedly as a significant predictor, and a possible explanation would be that participants with higher femininity could be more able to recognize the signs of rejection.

As expected and previously shown by Bleske-Rechek and Buss (2001) and Lewis et al. (2011) the physical protection provided by an opposite-sex friend proved to be more important to women. Men are physically stronger and the larger sex and it rarely happens that a woman has to physically protect a man. In our regression analysis, femininity was also a significant predictor, i.e., women with higher femininity evaluate physical protection as more important. A possible cause could be greater exposure of feminized

women to male aggression, because they are friendly, affectionate, and gentle, which makes them easier victims and therefore in more need for protection. Alternative explanations are socialization influences: the duty of a man is to protect his partner and a well socialized woman expects it. The existence of these preferences suggests that during our evolution women were exposed to physical danger, from either predators or men, and have solved this adaptive problem by evolving preferences for protection acquisition. If they had male companions (friends of partners) who were willing and able to physically protect them, women increased the chances of own survival and survival of their offspring. In this area, just like in resource acquisition, it was not enough just to find a partner that is able to protect (or provide), but that person has to be willing to use that ability to benefit the woman, which explains the preference for a reliable protective male friend.

Physical protection preference should be more expressed in women that live in more life threatening societies or situations, as it is more adaptive to provide physical protection in any way possible in those situations. Physical size and social status are not necessarily correlated in humans, and it would be interesting to explore the preference for social status as a way of providing safety, besides physical strength.

Relationship status of our participants didn't have a significant effect which does not confirm our hypothesis and is in conflict with Bleske-Rechek and Buss (2001) results. Possible reason could be that we had different effect in our male and female sample. While for both sexes it is better to have a variety of potential partners in case we are left alone, it seems men use OSF as a potential long and short term partner acquisition strategy. Quality of romantic relationship could also have an effect on seeking a new partner. In this area it would also be interesting to see whether there are any differences in quality and quantity of time spent with opposite-sex friends.

CONCLUSION

Initiation and dissolution of OSFs are related to gender, sociosexuality, and gender roles. Initiation of OSF because of sexual attraction and availability is more important to men and participants with higher sociosexuality, while friendship dissolution for the same reason is more important to those with higher sociosexuality, masculinity, and femininity. Initiation of OSF because of physical protection is more important to women and participants with higher femininity, and dissolution for the same reason is more important to women; OSF initiation because of the romantic relationship potential of a friendship is more important to men. These findings can be explained by sex differences in long-term mating strategies, rendering the reasons for initiation of OSFs similar to those for engaging in a long-term romantic relationship. Therefore, we could assume that, besides helping us to better understand the

opposite sex and providing support, opposite-sex friends are a kind of base from which potential long-term partners are chosen.

LIMITATIONS

The current study has found partial confirmation of evolutionary hypothesis for OSFs initiation and dissolution but it has several limitations. Participants were students, so it would be necessary to do more research with different samples. Further research would benefit from better specification of friendship and romantic relationship, as well as from measuring their quality. We have not excluded participant that reported having no current OSFs because we presumed they had experience with OSF. Reasons for initiation and dissolution have been calculated on a different number of items, which were selected based on their content, and it can be presumed that the situation of friendship dissolution has been hypothetical for some participants. Combination of better friendship specification with inclusion of participants that currently have OSF could yield more reliable results.

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